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Cultural Influence on Corporate Social Responsibility Disclosure in East Asia

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Abstract

This study investigates (1) whether there is a difference in firm CSR (Corporate Social Responsibility) disclosure practices among China, Japan, and Korea; (2) whether and which cultural factors affect CSR disclosure; and (3) whether the influence differs among CSR items. First, a content analysis of the CSR reports is conducted based on the framework of ISO 26000. Based on the analysis, we investigate cultural influence on CSR disclosures and the degree of influence among CSR items. This study provides evidence that, first, there are differences in CSR disclosure practices among the three countries. Second, cultural influence is reflected by CSR disclosures that are positively related to individualism, uncertainty avoidance, and masculine cultures, and negatively related to power distance. Third, cultural influence differs among CSR items. This study sheds light on the importance of cultural influence on CSR disclosure and the associated differences among CSR items, which imply that, even when global guidelines are introduced, firms might disclose differently depending on their culture. When regulators design institutional arrangements to promote CSR disclosures, they should consider the influence of domestic cultures and commit to improving disclosures of specific CSR areas where firms disclose less. Users should be careful to conduct cross-national comparisons of CSR disclosure.

Keywords: Corporate Social Responsibility; Disclosure; Culture; ISO 26000; East Asia

1. Introduction

Various studies suggest that financial accounting information has become less value-relevant over time (Francis and Schipper, 1999; Lev and Zarowin, 1999) because of changing business models that shift firm value drivers from tangibles to intangibles, increase redundant information, and decrease the interpretability of traditional financial statements. Over the last several decades, significant efforts have been made to complement financial reporting (Gray, 2010). One such effort involves social and environmental accounting. Since the 1980s, more firms have voluntarily published their environmental reports and, recently, firms have started to publish corporate social responsibility (CSR) and sustainability reports. These reports are now a standard global business practice.

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In descending order, China, Japan, and South Korea (hereafter, Korea) are the leading Asian countries in gross national product and CSR disclosures. China, Japan, and Korea have common roots based on Confucianism, and this cultural inheritance provides a competitive advantage for successful business activity (Hofstede and Bond, 1988). In addition, these three countries share similar regulatory backgrounds for CSR disclosures (Wong, 2009). However, there are significant differences in the countries' CSR disclosure practices.

Accounting practices, including disclosures, are increasingly considered societal practices rather than purely financial reporting (Burchell *et al.*, 1985). A country's accounting standards and practices are the result of a complex interaction among cultural, historical, economic, and institutional factors (Gordon *et al.*, 2013). Hofstede's (1980) analysis of culture and Gray's (1988) theory of the influence of culture on accounting are extensively applied in cross-cultural accounting studies to explain the differences across countries (e.g., Chand *et al.*, 2012). Compared to financial reporting, CSR disclosure is influenced by stakeholders' information needs that are based on their respective national cultural background. O'Riordan and Fairbrass (2008) suggest that Hofstede's (1980) work on culture is relevant to CSR practices.

Although Orij (2010) shows that CSR disclosure levels relate to national cultures, the author uses a secondary data source (the Siri database) for CSR disclosure. In addition, in an analysis of CSR disclosure, other conditions should be as equal as possible. Therefore, this study focuses on China, Japan, and Korea, where historical roots and the institutional background of CSR disclosures are similar, and uses primary data sources such as firm CSR or sustainability reports published in their local languages (in Chinese, Japanese, and Korean) for content analysis. This study addresses three key questions: (1) Is there a difference in firm CSR disclosure practices among Chinese, Japanese, and Korean firms, where the historical backgrounds and institutional environments for CSR disclosure are relatively similar? (2) Do cultural factors affect CSR disclosure, and what are the factors? (3) Does the influence differ among CSR items? First, a content analysis is conducted of the CSR reports of Chinese, Japanese, and Korean firms in their local languages based on the framework of the International Organization for Standardization (ISO) 26000—Social Responsibility. Based on this analysis, we investigate whether and how national cultures influence CSR disclosures and the degree of the influence among CSR items using the theories of Hofstede (1980) and Gray (1988).

The results reveal three key findings. First, we confirm evidence that there are differences in firm CSR disclosure practices among countries with relatively similar historical backgrounds and institutional CSR disclosure environments. Second, we provide evidence that the differences in CSR disclosures are partially attributable to domestic culture, in that

they are positively related to individualism, uncertainty avoidance, and masculine cultures, and negatively related to power distance. These findings are consistent with Gray's (1988) hypothesis. Third, this study is the first to show evidence that cultural influence on CSR disclosure differs among the core items of ISO 26000.

Our study contributes to the literature on CSR disclosures in the following ways. First, we show evidence that domestic culture influences firms' CSR disclosures in a rigorous setting among countries where historical backgrounds and institutional environments are similar. Second, our analysis uses primary CSR disclosure sources, such as firm reports published in their local language (Chinese, Japanese, and Korean), where previous research uses secondary data sources such as Siri (Orij, 2010).

The results imply that both regulators and users must acknowledge cultural bias in firm CSR disclosures. When regulators design institutional arrangements to promote firm CSR disclosures, they should consider the influence of domestic culture. Additionally, despite the excellent global CSR and sustainability disclosure guidelines, firms disclose differently depending on their local culture. Country regulators should commit to improving disclosure of specific CSR areas where firms are less likely to disclose. In addition, users of CSR disclosure should compare the disclosed information cross-nationally and provide feedback to firms to encourage and improve disclosure. Strategies to adjust to country cultural profiles are required for both regulators and users.

The remainder of this paper is organized as follows. Section 2 reviews the institutional background of CSR disclosures and the related research. Section 3 describes the research design and hypotheses. Section 4 presents the sample, key findings, and supplementary analysis. Section 5 presents the conclusions.

2. Background and Previous Research

2.1 Institutional Background of CSR Disclosures

China, Japan, and Korea have common roots based on Confucianism, influenced by Chinese civilization. Confucian ethics emanate an emphasis on social obligations, ethical decision-making, positive business dealings and harmonious relationships within organizations, and the value of learning and education; these bring attendant benefits and good practices, including good business management and labor practices, as well as CSR (Law and Ang, 2013). It is well known that these three countries are the leading Asian countries in CSR disclosures.

In addition, China, Japan, and Korea have similar frameworks for CSR disclosures (Wong, 2009). In China, the Shanghai Stock Exchange and the Shenzhen Stock Exchange issued a notice and guidelines, respectively, in 2006, suggesting that listed firms disclose CSR information. In 2008, the Chinese Stock Regulatory Commission made the CSR report

a formal requirement for three types of listed firms on the Shanghai Stock Exchange—firms in the financial services industry, firms in the corporate governance composite index group, and firms listed on foreign exchange markets. The number of Chinese firms that publish CSR reports has grown rapidly over the last several years (Zhao, 2012; Yao *et al.*, 2013).

In Japan, the Ministry of the Environment issued Environmental Reporting Guidelines in 2001, which were subsequently revised in 2003, 2007, and 2012. In 2005, the Law Concerning the Promotion of Business Activities with Environmental Consideration by Specified Corporations, etc., by Facilitating Access to Environmental Information, and Other Measures was enacted requiring designated highly public organizations, including national universities, the Japan Broadcasting Corporation, and Nippon Telegraph and Telephone Corporation, to publish environmental reports. These guidelines and law facilitate firm environmental and CSR disclosures and improve their quantity and the quality.

Korea has enacted guidelines similar to those issued by the Japanese Ministry of the Environment. The Korean Ministry of Environment issued the Environmental Reporting Guideline in 2000, and this was revised in 2002. Additionally, the Korean Ministry of Environment launched the Corporate Environmental Information Disclosure Scheme in Korea in 2010. The Korea Chamber of Commerce and Industry issued Sustainability Management Report Indicators. Korean CSR practices resemble those of Japan (Lee, 2012).

Overall, the regulatory backgrounds of CSR disclosures of these three countries are similar, and are based on domestic guidelines and voluntary submission, with the exception of certain designated firms.

2.2 The Influence of National Culture on Accounting

In contrast to single-country studies, there are unique challenges in designing and completing cross-country accounting studies. A country's accounting standards and practices are the result of complex interactions among cultural, historical, economic, and institutional factors (Gordon *et al.*, 2013), and the application of judgment in accounting is a function of various factors, including individual cultural values (e.g., Chand *et al.*, 2012). Culture can determine specific characteristics of a group and can explain contrasting business behaviors in different locations (Kim and Choi, 2013). Existing studies explore the relationship between culture and accounting practices, a controversial area of international accounting research (e.g., Gray, 1988; Smith, 2002; Noravesh *et al.*, 2007; Finch, 2009; Han *et al.*, 2010; Kanagaretnam *et al.*, 2011; Rapp *et al.*, 2011; Borker, 2012a, 2012b; Chand *et al.*, 2012; Holmen, 2014).

CSR is also the consequence of the institutional and cultural environment (Welford, 2005; Tang and Li, 2009; Kim and Kim, 2010), therefore, countries exhibit differences in both CSR practices and disclosure (Chen and Bouvain, 2009). Since mandatory disclosures

do not necessarily include all information demanded by stakeholders, firms voluntarily disclose information, including CSR disclosure, to increase corporate transparency and reduce information asymmetry (Healy and Palepu, 2001). The variations in voluntary disclosures are more related to cultural differences among nations (Kumar, 2013; Holmen, 2014) than mandatory disclosures. Orij (2010) finds that CSR disclosure levels are likely to be influenced by national cultures, and Asian countries' CSR disclosures especially vary considerably among countries (Chapple and Moon, 2005).

Cultural inheritance is not genetically transferred, and cultural values are generally static over time (Hofstede and Bond, 1988; Chand *et al.*, 2012). Since Hofstede's culture types have been widely used in empirical research (Sondergaard, 1994; Rapp *et al.*, 2011), this study also uses Hofstede (1980) indices. In addition, accepting critiques (Fujita, 2002; McSweeney, 2002) of Hofstede (1980), the authors use alternative indicators instead of Hofstede's in the second additional analysis to confirm the cultural influence on CSR disclosure.

Furthermore, Gray (1988) also suggests that the prevailing accounting values in a country are influenced not only by national cultural values but also by other institutional consequences. Given the complexity of the relationships between culture and other factors, an analysis of cultural influence on CSR disclosure requires that, to the extent possible, other conditions are equal. Therefore, this study focuses on China, Japan, and Korea, where historical roots, economies, and the institutional background of CSR disclosure are relatively similar. In addition, we consider stakeholder effects on CSR disclosure, as described in the next section.

2.3 Determinants of CSR Disclosures

Several prior studies address CSR disclosure practices in China, Japan, and Korea. Studies on CSR disclosures by Chinese firms reveal that disclosures are positively related to firm profitability, firm size, media exposure, ownership concentration, institutional shareholding, and sensitivity towards the environment (Liu and Anbumozhi, 2009; Yao *et al.*, 2013; Lu and Abeysekera, 2014). In Japan, CSR performance, financial performance, size, and industry type are positively related to CSR disclosures (Saka and Noda, 2013). Korean studies show that large companies are more likely to disclose CSR activity (Lee, 2012).

There is growing research on the determinants of CSR disclosures other than cultural factors. Based on stakeholder theory, a firm's success is dependent upon the successful management of all relationships a firm has with its stakeholders (Elijido-Ten, 2007; Elijido-Ten *et al.*, 2010). Since firms should consider the concerns of a wide range of stakeholders and incorporate their needs into the disclosure process, voluntary CSR disclosure requires

greater judgment by firms than regulatory financial reporting, and is affected by the firm's shareholder structure and power (e.g., Roberts, 1992; Huang and Kung, 2010). For example, large or profitable firms tend to engage in CSR disclosure, taking into consideration the effects of government (e.g., Cox and Douthett, 2009; Gamerschlag *et al.*, 2011; Saka and Noda, 2013) because very large or highly profitable firms tend to attract political attention, which incurs political cost (Watts and Zimmerman, 1986). Creditors affect a firm's CSR disclosure through their governance (e.g., Saka and Noda, 2013). Non-government organizations (NGOs) also affect CSR disclosure; to avoid negative campaigns by environmental conservation groups, the number of firms that engage in CSR activities with the cooperation of NGOs is rising (Van der Laan *et al.*, 2008), and high-profile environmental industries tend to be more affected.

Based on these previous research results, this study addresses three key questions: (1) Is there a difference in CSR disclosure practices of firms in China, Japan, and Korea, where the historical backgrounds and institutional environments for CSR disclosure are relatively similar? (2) Do cultural factors affect CSR disclosure, and what are the factors? (3) Does the influence differ among CSR items? Significant knowledge concerning the influence of culture on disclosure is required for a clear understanding of the differences in CSR disclosure across countries, and to move toward global improvement of CSR disclosure.

3. Research Design

3.1 CSR Disclosures and Culture Indices

China, Japan, and Korea were selected for this study to eliminate factors other than cultural differences, such as institutional, economic, and historical differences, based on the following characteristics. First, China, Japan, and Korea have common historical roots and background, and the Confucian ethical structure continues to influence business perspectives in these countries (Jacobs *et al.*, 1995; Hofstede and Bond, 1988; Boardman and Kato, 2003; Park *et al.*, 2005). Second, in descending order of gross national product, China, Japan, and Korea represent the top three Asian countries; thus, their economic development and level of globalization are more similar than those of other Asian countries. Third, the regulatory background of CSR disclosure in these three countries is similar, and disclosure is mainly on a voluntary basis. Despite these similarities, there are actual differences in CSR disclosure in China, Japan, and Korea, which are presented in Table 1 later in the paper.

In addition, most of the previous research uses a secondary data source (e.g., the Siri database) for CSR disclosure, which might induce a data processing bias. Therefore, this study goes directly to primary data sources—firm CSR or sustainability reports published in local languages (in Chinese, Japanese, and Korean)—to analyze the content. Using the results of the analysis, the cultural influence on CSR disclosures is examined based on

Hofstede's (1980) indices and Gray's (1988) theory. Two additional analyses are conducted: (1) an analysis examining cultural influence on each subject of CSR disclosure, and (2) an analysis using alternative indices to Hofstede's to confirm the cultural influence on CSR disclosure.

First, this study investigates whether the contents of CSR disclosures differ across these three countries. The research target is CSR or sustainability reports published by all listed Chinese, Japanese, and Korean firms in their local language. We collected all available CSR reports from all listed firms of the Shanghai Stock Exchange, the Tokyo Stock Exchange, and the Korea Stock Exchange as of July 2013. CSR reports were collected for 279 Chinese firms, 345 Japanese firms, and 48 Korean firms (see Section 4.1 for the sample selection method). We analyzed and quantified the CSR reports by reading each firm's entire report in their local language (Chinese, Japanese, and Korean), and scored them using the ISO 26000 framework. Previous studies relied on simple measures, such as word and page counts, to compare the extent of CSR disclosure; however, such a method may not capture significant differences in the content of these reports (Chen and Bouvain, 2009). Several existing studies quantify firm-level CSR disclosures based on GRI (Global Reporting Initiatives) Sustainability Reporting Guidelines (Clarkson *et al.*, 2008), and Wiseman's classification (Huang and Kung, 2010). However, ISO 26000 is the framework for our analysis for two reasons. At the time the disclosures used in this study were prepared, some firms were using the GRI guidelines (G4) issued in 2013, but most firms were using the older version of those guidelines (G3), so they may not have been consistently prepared, or were prepared with out-of-date guidelines. Wiseman's classification focuses only on environmental issues, which is insufficient for our analysis.

ISO 26000 was developed through a multi-stakeholder process, including 99 countries and 42 organizations from industries, NGOs, and intergovernmental organizations. The CSR requirements under ISO 26000 reflect the demands of the various stakeholders. ISO 26000 comprises seven core subjects that organizations must consider as part of their social responsibility commitments—*organizational governance, human rights, labor practices, environment, fair operating practices, consumer issues, and community involvement and development*. These seven core subjects are further composed of 37 issues. To calculate our CSR disclosure score, we scored each of the 37 issues for each firm's disclosure as follows. Based on the content analysis, we recorded a value of two if the firm disclosed quantitative information, one if the firm disclosed qualitative information, and zero if it did not disclose any information. Thus, the value of the CSR disclosure score, *CSR*, ranges from zero to 74.

Table 1 presents the CSR disclosure average score ratio for the Chinese, Japanese, and Korean firms for each of the 37 issues of ISO 26000. The overall CSR disclosure ratio is highest for Korean firms at 45%, followed by Japanese firms at 38%, and Chinese firms at

Table 1. Chinese, Japanese, and Korean firms' CSR disclosure score ratio by ISO26000, 37 issues*

Items	Core subjects and issues	ISO section	Chinese firms CSR disclosure ratio (%) 279 firms	Japanese firms CSR disclosure ratio (%) 345 firms	Korean firms CSR disclosure ratio (%) 48 firms
1	Organizational Governance	6.2	47%	37%	60%
	Human rights	6.3	16%	34%	40%
2	Due diligence	6.3.3	13%	33%	31%
3	Human rights risk situations	6.3.4	3%	23%	36%
4	Avoidance of complicity	6.3.5	1%	19%	9%
5	Resolving grievances	6.3.6	4%	34%	45%
6	Discrimination and vulnerable groups	6.3.7	13%	58%	47%
7	Civil and political rights	6.3.8	23%	34%	39%
8	Economic, social and cultural rights	6.3.9	52%	34%	68%
9	Fundamental rights at work	6.3.10	16%	40%	47%
	Labor practices	6.4	36%	47%	56%
10	Employment and employment relationships	6.4.3	24%	41%	56%
11	Conditions of work and social protection	6.4.4	25%	57%	43%
12	Social dialogue	6.4.5	7%	23%	28%
13	Health and safety at work	6.4.6	50%	63%	68%
14	Human development and training in the workplace	6.4.7	76%	49%	84%
	Environment	6.5	31%	84%	60%
15	Prevention of pollution	6.5.3	39%	93%	66%
16	Sustainable resource use	6.5.4	49%	92%	69%
17	Climate change mitigation and adaptation	6.5.5	27%	97%	81%
18	Protection and restoration of the natural environment	6.5.6	10%	53%	24%
	Fair operating practices	6.6	13%	24%	36%
19	Anti-corruption	6.6.3	21%	35%	49%
20	Responsible political involvement	6.6.4	2%	10%	3%
21	Fair competition	6.6.5	20%	34%	51%
22	Promoting social responsibility in the sphere of influence	6.6.6	17%	32%	51%
23	Respect for property rights	6.6.7	6%	12%	23%
	Consumer issues	6.7	14%	33%	38%
24	Fair marketing, factual and unbiased information and fair contractual practices	6.7.3	10%	31%	32%
25	Protecting consumers' health and safety	6.7.4	25%	43%	39%
26	Sustainable consumption	6.7.5	16%	40%	55%
27	Consumer service, support, and dispute resolution	6.7.6	28%	46%	49%
28	Consumer data protection and privacy	6.7.7	6%	29%	46%
29	Access to essential services	6.7.8	6%	12%	15%
30	Education and awareness	6.7.9	11%	28%	30%
	Community involvement and development	6.8	33%	26%	45%
31	Community involvement	6.8.3	36%	47%	63%
32	Education and culture	6.8.4	27%	41%	44%
33	Employment creation and skills development	6.8.5	25%	19%	52%
34	Technology development and access	6.8.6	13%	16%	14%
35	Wealth and income creation	6.8.7	69%	10%	45%
36	Health	6.8.8	11%	29%	22%
37	Social investment	6.8.9	47%	23%	73%
	Total		24%	38%	45%

* The ratio of average score to maximum score on CSR information disclosure of 37 issues (the disclosure score takes on the value 2 if firms disclose quantitative information, 1 if firms disclose qualitative information, and 0 if there is no information.)

24%. However, the number of firms that publish CSR reports is the smallest for Korean firms. Moreover, of the 48 Korean firms, 21 firms belong to the big four chaebol group (Samsung, Hyundai, LG, and SK); thus, the big four chaebol group firms' disclosure trend influences the Korean results.

The issues for which firms make maximum disclosures have some differences across countries. Except for *organizational governance*, which is comprised of only one item, the highest and second-highest disclosure ratios for Chinese firms are *Labor practices* (36%) and *Community involvement and development* (33%). The highest and second-highest disclosure ratios for Japanese firms are *Environment* (84%) and *Labor practices* (47%), while the highest and second-highest disclosure ratios for Korean firms are *Environment* (60%) and *Labor practices* (56%). Firms in all three countries disclosed *Fair operating practices* the least. In addition, the disclosure ratios for *Human rights* (16%) and *Consumer issues* (14%) in China were much lower than the ratios for Japan and Korea.

Table 2 presents the analysis of variance (ANOVA) tables of CSR disclosure scores. The test of mean differences of total scores for the three countries is significant, and the tests of mean differences of each core subject are significant, which implies that CSR disclosures among China, Japan, and Korea are significantly different. This study investigated whether and which culture factors explain the differences in CSR disclosure.

Hofstede's *Culture's Consequences* (1980) identified four dimensions of culture, as a result of his extensive research (conducted in 1967-69 and 1971-73) through an international comparison of corporate culture, using data from 117,000 IBM workers across 66 countries. Although Hofstede (1980) is critiqued because it did not explicitly present the exact computation formula (Fujita, 2002; McSweeney, 2002), Hofstede's analysis of culture (1980) and Gray's theory on the influence of culture on accounting (1988) have been used extensively in cross-cultural studies in accounting to explain differences in judgments across countries (e.g., Smith, 2002; Noravesh *et al.*, 2007; Tsakumis, 2007; Finch, 2009; Han *et al.*, 2010; Kanagaretnam *et al.*, 2011; Borker, 2012a, 2012b; Chand *et al.*, 2012; Holmen, 2014). Beyond citation, Hofstede's culture types have been widely used in empirical research, resulting in confirmation of his results and validation of the dimensions (Sondergaard, 1994; Rapp *et al.*, 2011). In addition, cultural inheritance is not genetically transferred, and cultural values are generally static over time (Hofstede and Bond, 1988; Chand *et al.*, 2012). Therefore, Hofstede (1980) indices are used in this study. In addition, accepting the critiques of Hofstede (1980), alternative indicators are used in the second additional analysis to confirm the cultural influence on CSR disclosure.

Hofstede (1980) presents indices for China, Japan, and Korea along the four dimensions of *individualism*, *power distance*, *uncertainty avoidance*, and *masculinity*. The overall values of the *individualism* indices range from 3 to 91 and from low to high; these values are 20

Table 2. Analysis of variance (ANOVA) tables of CSR disclosure scores among China, Japan, and Korea

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
<i>CSR</i>					
country	2	21067.08	10533.54	123.73	0.0000
Residuals	666	56697.06	85.13		
<i>ORGAN</i>					
country	2	13.45	6.72	31.84	0.0000
Residuals	666	140.63	0.21		
<i>HUMAN</i>					
country	2	1539.23	769.61	85.46	0.0000
Residuals	666	5997.77	9.01		
<i>LABOR</i>					
country	2	219.55	109.78	27.34	0.0000
Residuals	666	2673.99	4.02		
<i>ENVIR</i>					
country	2	2542.22	1271.11	521.21	0.0000
Residuals	666	1624.21	2.44		
<i>FAIR</i>					
country	2	300.35	150.17	72.21	0.0000
Residuals	666	1385.01	2.08		
<i>CONSU</i>					
country	2	1158.68	579.34	135.59	0.0000
Residuals	666	2845.74	4.27		
<i>COMMU</i>					
country	2	337.22	168.61	31.63	0.0000
Residuals	666	3550.31	5.33		

CSR = Total CSR disclosure score for 37 items, *ORGAN* = Organizational governance disclosure score for 1 item, *HUMAN* = Human rights disclosure score for 8 items, *LABOR* = Labor practices disclosure score for 5 items, *ENVIR* = Environment disclosure score for 4 items, *FAIR* = Fair operating practices disclosure score for 5 items, *CONSU* = Consumer issues disclosure score for 7 items, *COMMU* = Community involvement and development disclosure score for 7 items.

for China, 46 for Japan, and 18 for Korea. The overall values of the *power distance* indices range from 11 to 104 and from low to high; the indices' values are 80 for China, 54 for Japan, and 60 for Korea. The overall values of the *uncertainty avoidance* indices range from 6 to 112 and from low to high; the indices' values are 30 for China, 92 for Japan, and 85 for Korea. Finally, the overall values of the *masculinity* indices range from 5 to 95 and from low to high; the indices' values are 66 for China, 95 for Japan, and 39 for Korea. Among

the three countries, China scores highest for the *power distance* aspect and lowest for the *uncertainty avoidance* aspect; Japan scores highest for the *individualism*, *uncertainty avoidance*, and *masculinity* aspects, whereas Korea scores lowest for the *individualism* and *masculinity* aspects. Based on these measures, hypotheses are developed in the following section.

3.2 Hypotheses Development

Based on the data collected by Hofstede (1980), Gray (1988) suggests a hypothetical set of relationships using Hofstede's dimensions and his own culturally derived accounting value dimensions. Gray's (1988) application of Hofstede's cultural dimensions (Hofstede, 1980, 1983, 2001; Hofstede and Bond, 1988) has led to numerous related studies (e.g., Smith, 2002; Chanchani and Willett, 2004; Noravesh *et al.*, 2007; Finch, 2009; Borker, 2012b; Kumar, 2013). Gray's (1988) set of accounting values are related to Hofstede's (1980) dimensions and are based on the argument that culture influences accounting practices (Borker, 2012a). Hofstede (1980) identified the following four factors as cultural dimensions:

(1) Individualism

Individualism indicates a preference for a loosely knit societal framework where individuals and their immediate family are independent. In contrast, collectivism indicates a preference for a tightly knit societal framework where individuals can expect their relatives, clan, or any other close group to care for them in exchange for unquestioning loyalty (Hofstede, 1980, 1983). Gray (1988) hypothesized that the lower a country ranks in terms of individualism, the higher it will rank in terms of secrecy. Noravesh *et al.* (2007) support this hypothesis. Kumar (2013) documents that firms from individualistic countries provide more voluntary disclosures than those from collectivist countries. In a collectivist society, firms give their information directly to the stakeholder, and tend to restrict the disclosure of information to outsiders. Societies characterized by high levels of individualism have a higher tolerance for unilateral decision-making and individual initiatives, which are also pursued to distinguish oneself from others, which results in high corporate CSR capability (Matthiesen and Salzmänn, 2016). Previous research also shows that individualistic societies are more likely to punish unethical business practices (Williams and Zinkin, 2008). A higher demand for CSR results in firms responding to stakeholders' expectations; therefore, we expect a positive relationship between individualism and CSR. Ioannou and Serafeim (2012) find a positive relationship between Hofstede's individualism dimension and CSR. Adnan *et al.* (2014) indicate that CSR reporting is prominent in countries that have individualistic societies. Therefore, firms in an individualistic society are more likely to disclose higher levels of CSR information than those in a collectivist society. The first hypothesis is as

follows:

H1. Individualism is positively related to CSR disclosure levels.

(2) Power distance

Power distance is the extent to which the less powerful members of organizations and institutions accept and expect that power is distributed unequally among them. Power and inequality are a fundamental societal condition (Hofstede, 1980, 1983). Gray (1988) hypothesized that the higher a country ranks in terms of power distance, the more likely it will rank highly in terms of secrecy. Noravesh *et al.* (2007) support this hypothesis. Kumar (2013) suggests that information from authorities is questioned to a lesser extent in a high power-distance society. In addition, power distance exhibits a negative influence on CSR in most studies (Matthiesen and Salzmann, 2016). Regarding Hofstede's power distance dimension, Ringov and Zollo (2007), and Ioannou and Serafeim (2012) theorize it and find the relationship, which they attribute to business leaders' use of power for the pursuit of personal benefit (Liang *et al.*, 2014). Therefore, societies with low levels of power distance are likely to discourage extensive sharing of information. Firms in a low power distance society are more likely to disclose higher levels of CSR information than firms in a collectivist society. The second hypothesis is as follows:

H2. Power distance is negatively related to CSR disclosure levels.

(3) Uncertainty avoidance

Uncertainty avoidance indicates the degree to which members of a society are uncomfortable with uncertainty and ambiguity. Uncertainty avoiding cultures attempt to minimize uncertainty through strict laws, rules, and safety and security measures (Hofstede, 1980, 1983). Gray (1988) suggests that a preference for conservative profit measures is consistent with strong uncertainty avoidance. Based on this hypothesis, Chalmers *et al.* (2014) show that a risk-averse attitude leads to lower materiality thresholds. A lower materiality threshold implies higher CSR information disclosures. Williams (1999) finds that uncertainty avoidance is related to voluntary environmental and social disclosure. In addition, from the perspective of CSR, Matthiesen and Salzmann (2016) state that business strategies to help develop sustainable relationships with stakeholders and to minimize the likelihood of negative events in turn minimize long-term uncertainty, which suggests a positive relationship between uncertainty avoidance and CSR. Ho *et al.* (2012) find a positive relationship between uncertainty avoidance and CSR activities. Thus, the third hypothesis is as follows:

H3. Uncertainty avoidance is positively related to CSR disclosure levels.

(4) Masculinity

Masculinity indicates a society's preference for achievement, heroism, assertiveness, and material success (Hofstede, 1980, 1983). Gray (1988) hypothesized that the lower a country

ranks in terms of masculinity, the more likely it will rank highly in terms of secrecy. Masculinity is negatively correlated to secrecy; instead, it is positively related to disclosure. Williams (1999) finds that masculinity is related to voluntary environmental and social disclosure. In addition, from the perspective of CSR activities, regarding Hofstede's masculinity dimension, Ho *et al.* (2012) find a positive relationship. Thus, the fourth hypothesis is as follows:

H4. Masculinity is positively related to CSR disclosure levels.

3.3 Estimated Model

Table 3 summarizes firms' average CSR disclosure scores by country. Among the three countries, 48 Korean firms show the highest mean *CSR* at 33.0 points, followed by 345 Japanese firms with a moderate mean *CSR* of 28.3 points, and 279 Chinese firms with the lowest mean *CSR* of 17.7 points. In addition, Table 3 presents the *CSR* for these three countries by subject for the seven core ISO 26000 subjects. This suggests that firms' CSR disclosure practices differ according to CSR issues and by country.

Table 3. Average CSR disclosure scores by country

	China (N=279)	Japan (N=345)	Korea (N=48)
<i>CSR</i> (0-74)	17.74	28.31	33.02
<i>ORGAN</i> (0-2)	0.95	0.74	1.21
<i>HUMAN</i> (0-16)	2.56	5.49	6.35
<i>LABOR</i> (0-10)	3.70	4.66	5.58
<i>ENVIR</i> (0-8)	2.63	6.70	4.77
<i>FAIR</i> (0-10)	1.34	2.46	3.56
<i>CONSU</i> (0-14)	2.02	4.60	5.29
<i>COMMU</i> (0-14)	4.53	3.67	6.25

Considering stakeholders' influence on CSR disclosure, our empirical model incorporates four stakeholder power proxies as control variables to abstract the influence of cultural factors. Size and profitability are proxies for governments, which can create political costs; the debt-equity ratio is a proxy for creditors; and high-profile environmental industries is a proxy for environmental conservation groups. In addition, although Gray (1988) suggests that the prevailing accounting values in a country are influenced not only by national cultural values but also by other institutional factors, three countries with relatively similar economic background and institutional background on CSR disclosure are the subject of this

study, which allows us to focus on the effect of cultural factors. Hence, this study estimates the following model that incorporates Hofstede's cultural dimensions:

$$CSR_j = \alpha_0 + \alpha_1 CD_j + \alpha_2 \log(SALES) + \alpha_3 ROA + \alpha_4 DE + \alpha_5 HPEI + \varepsilon_j, j=1, \dots, 4,$$

where CD_j denotes the cultural dimensions, which are $CD_1 = IDV$, $CD_2 = PDI$, $CD_3 = UAI$, and $CD_4 = MAS$, IDV denotes the individualism index, PDI denotes the power distance index, UAI denotes the uncertainty avoidance index, and MAS denotes the masculinity index. These variables take the values of Hofstede's index by country. The coefficients of IDV , UAI , and MAS are expected to be positive, whereas the coefficient of PDI is expected to be negative. The model incorporates log of sales ($\log(SALES)$), return on assets (ROA), and the debt-to-equity ratio (DE) to control for firm profitability and capital structure, and high-profile environmental industries ($HPEI$) to control for the effect of environmental conservation groups.

4. Results

4.1 Sample and Data

The principle stock exchanges for China, Japan, and Korea were the sources for the study sample. All CSR reports of the listed firms from the largest CSR reports websites in each country were collected. As of July 2013, 279 Chinese firms out of 941 total A-share firms listed on the Shanghai Stock Exchange disclose CSR reports on the Syntao website. 345 Japanese firms out of 1,787 total firms listed on the First Section of the Tokyo Stock Exchange disclose CSR reports on the Environmental Reporting Plaza website provided by the Japanese Ministry of Economy, Trade, and Industry. 48 Korean firms out of 774 total firms listed on the Korea Stock Exchange disclose CSR reports on the Business Institute for Sustainable Development website provided by the Korean Chamber of Commerce and Industry. We collected all CSR reports for all these firms for the year 2012, using the version published in their local languages, and the related financial data for each firm was obtained from the NEEDS financial database by Nikkei Digital Media, the Compustat database by Standard and Poor's, and the firms' annual reports.

4.2 Estimation Results

Tables 4 and 5 present the descriptive statistics and correlation coefficient matrices, respectively. As Table 5 demonstrates, the four Hofstede cultural dimension variables are highly correlated, which suggests the presence of multicollinearity. Therefore, models are estimated that contain one cultural dimension variable, while alternately removing the other three variables.

Table 6 presents the results of the ordinary least squares (OLS) model estimations. The values in parentheses are White's heteroskedasticity-consistent standard errors. The first

Table 4. Descriptive statistics (N = 669)

	Mean	Maximum	Minimum	Std. Dev.
<i>IDV</i>	33.21	46.00	18.00	13.16
<i>PDI</i>	65.22	80.00	54.00	12.55
<i>UAI</i>	65.76	92.00	30.00	30.20
<i>MAS</i>	78.96	95.00	39.00	17.79
<i>log(SALES)</i>	834950	30310986	1502	2276492
<i>ROA</i>	2.20	25.53	-7.35	3.74
<i>DE</i>	2.02	19.90	0.05	2.67

IDV = Individualism, *PDI* = Power distance, *UAI* = Uncertainty avoidance, *MAS* = Masculinity, *log(SALES)* = log of Sales, *ROA* = Return on assets, *DE* = Debt-to-equity ratio.

Table 5. Pearson correlation coefficients for independent variables (N = 669)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) <i>IDV</i>	1.000						
(2) <i>PDI</i>	-0.903	1.000					
(3) <i>UAI</i>	0.940	-0.998	1.000				
(4) <i>MAS</i>	0.875	-0.703	0.658	1.000			
(5) <i>log(SALES)</i>	0.244	-0.344	0.353	0.132	1.000		
(6) <i>ROA</i>	-0.092	0.198	-0.210	0.004	-0.143	1.000	
(7) <i>DE</i>	-0.271	0.056	-0.024	-0.405	0.282	-0.286	1.000

column shows the OLS estimate of the coefficient of *IDV* (Model 1). The coefficient of *IDV* is significant and positive ($p < 0.001$). This may reflect the higher preference for a loosely knit social framework, which facilitates more CSR disclosures; thus, hypothesis 1 is supported. This result may be caused by differences in the *IDV* index between the Japanese and Chinese firms. Japan has an *IDV* index of 46, with a moderate CSR disclosure level. In contrast, the Chinese *IDV* index is 20 with the lowest level of CSR disclosure. Therefore, *IDV* is positively related to CSR disclosure.

Model 2 uses *PDI* as the cultural dimension. The coefficient of *PDI* is significant and negative at the 0.1% level. This suggests that the higher the degree to which the less powerful members of a society accept and expect that power is unequally distributed, the less the amount of CSR information disclosed; thus, hypothesis 2 is supported. The Japanese firms have a *PDI* index of 54, while the Chinese firms have a *PDI* index of 80. Therefore, *PDI* has a negative relationship with CSR disclosure levels. This result is

consistent with the idea that high power distance makes managers act in a more self-interested way rather than considering the interests of society (Matthiesen and Salzmann, 2016)

In Model 3, the coefficient of *UAI* is significant ($p < 0.001$) and positive, which indicates that hypothesis 3 is supported. This suggests that uncertainty avoidance in a society increases its CSR disclosure. Japan and Korea, where firms disclose CSR information at relatively high levels, have a *UAI* of 92 and 85, respectively, whereas the Chinese *UAI* has a

Table 6. Regression results (Dependent variable: CSR)

	Sign	Model 1	Model 2	Model 3	Model 4
Intercept		-19.514*** (-7.571)	12.028*** (3.286)	-16.921*** (-6.823)	-24.235*** (-8.310)
<i>IDV</i>	(+)	0.243*** (8.507)			
<i>PDI</i>	(-)		-0.314*** (-11.021)		
<i>UAI</i>	(+)			0.132*** (11.211)	
<i>MAS</i>	(+)				0.121*** (5.423)
<i>log (SALES)</i>		2.799*** (12.902)	2.560*** (12.039)	2.548*** (12.019)	3.104*** (14.202)
<i>ROA</i>		0.018 (0.191)	0.102 (1.075)	0.109 (1.150)	-0.062 (-0.623)
<i>DE</i>		0.289** (3.072)	0.181* (2.113)	0.1541 (1.812)	0.234* (2.304)
<i>HPEI</i>		1.133 (1.647)	0.970 (1.460)	0.932 (1.407)	1.080 (1.521)
Adj. R ²		0.362	0.402	0.405	0.322
<i>F</i> statistic		76.68***	90.65***	91.85***	64.45***
<i>N</i>		669	669	669	669

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. *IDV*, *PDI*, *UAI* and *MAS* are one-tailed. *IDV* = Individualism, *PDI* = Power distance, *UAI* = Uncertainty avoidance, *MAS* = Masculinity, *log (SALES)* = log of sales, *ROA* = Return on assets, *DE* = Debt-to-equity ratio, *HPEI* = High-profile environmental industries dummy. White heteroskedasticity-consistent standard errors are in parentheses.

value of 30. This attitude toward uncertainty may create a situation where firms are required to provide further CSR information.

In Model 4, the coefficient of *MAS* is significant ($p < 0.001$) and positive, as expected. Japan and China have an *MAS* index of 95 and 66, respectively. These results suggest that competitiveness in society encourages firm CSR disclosure; thus, hypothesis 4 is supported.

4.3 Additional Analysis

(1) Cultural influence on each subject of CSR disclosure

Table 1 and Table 2 show that firms' CSR disclosure practices differ according to CSR issues and country. Therefore, the CSR disclosure scores are divided into six categories according to the ISO 26000 core subjects on CSR (*HUMAN*, *LABOR*, *ENVIR*, *FAIR*, *CONSU*, and *COMMU*), and are used as dependent variables to estimate Equation (1). Tables 7 to 12 show the estimation results using the ISO 26000 categories.

Table 7 displays estimation results using the human rights score (*HUMAN*), which shows results similar to those in Table 6. Table 8 shows that estimation results using the labor practices score (*LABOR*) are also similar to those in Table 6. *MAS*, however, is not significantly related to *LABOR* in Model 4. This suggests that the degree of masculinity in society does not affect firm disclosure of labor practices. Estimation results using the environmental disclosure score (*ENVIR*) are shown in Table 9, and Hofstede's cultural dimension variables are significantly related to the environmental disclosure score in each model, which portray results similar to those in Table 6. Table 10 shows that estimation results using the fair operating practices score (*FAIR*) are like those in Table 6. Estimation results using the consumer issues score (*CONSU*) are presented in Table 11; the results shown are similar to those in Table 6. Interestingly, estimation results using the community involvement and development score (*COMMU*) in Table 12 show results that are opposite to those in Table 6. This suggests that there is a different mechanism for firm disclosure of community involvement and development.

(2) Cultural Influence on CSR disclosure using alternative indices

Because similar cultural backgrounds among the three countries might have changed over the last couple of decades since the Hofstede research, we conduct an additional analysis for our hypotheses using alternative cultural indices. We used *Perceptions of society (Trust in people) (PS)* instead of individualism (*IDV*), *Perceptions of individual well-being (Satisfaction with freedom of choice) (PIW)* instead of power distance (*PDI*), both of which are from the United Nations Human Development Index from the UN Human Development Report 2013, and *Gender gap index rank (GGI)* instead of Masculinity (*MAS*), which is from the Global Gender Gap Report 2012 by the World Economic Forum. There is no alternative index for *UAI* from any other reliable source.

Table 7. Regression results (Dependent variable: *HUMAN*)

	Sign	Model 1	Model 2	Model 3	Model 4
Intercept		-6.310*** (-7.219)	2.617* (0.664)	-5.575*** (-6.555)	-7.661*** (-7.817)
<i>IDV</i>	(+)	0.069*** (7.123)			
<i>PDI</i>	(-)		-0.089 (-9.102)		
<i>UAI</i>	(+)			0.037*** (9.247)	
<i>MAS</i>	(+)				0.034*** (4.607)
Results of <i>log (SALES)</i> , <i>ROA</i> , <i>DE</i> , <i>HPEI</i> are omitted					
Adj. R ²		0.243	0.275	0.277	0.210
<i>F</i> statistic		43.78***	51.71***	52.37***	34.48***
<i>N</i>		669	669	669	669

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. *IDV*, *PDI*, *UAI* and *MAS* are one-tailed. White heteroskedasticity-consistent standard errors are in parentheses.

Table 8. Regression results (Dependent variable: *LABOR*)

	Sign	Model 1	Model 2	Model 3	Model 4
Intercept		-0.824 (-1.405)	1.784* (0.462)	-0.637 (-1.098)	-0.978 (-1.512)
<i>IDV</i>	(+)	0.016** (2.535)			
<i>PDI</i>	(-)		-0.026*** (-3.951)		
<i>UAI</i>	(+)			0.011*** (4.097)	
<i>MAS</i>	(+)				0.005 (1.046)
Results of <i>log (SALES)</i> , <i>ROA</i> , <i>DE</i> , <i>HPEI</i> are omitted					
Adjusted R ²		0.112	0.124	0.126	0.105
<i>F</i> statistic		17.85***	19.92***	20.18***	16.66***
<i>N</i>		669	669	669	669

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. *IDV*, *PDI*, *UAI* and *MAS* are one-tailed. White heteroskedasticity-consistent standard errors are in parentheses.

Table 9. Regression results (Dependent variable: *ENVIR*)

	Sign	Model 1	Model 2	Model 3	Model 4
Intercept		-2.411*** (-5.095)	12.603*** (19.190)	-1.022* (0.254)	-6.024*** (-10.072)
<i>IDV</i>	(+)	0.137*** (26.038)			
<i>PDI</i>	(-)		-0.148*** (-28.898)		
<i>UAI</i>	(+)			0.061*** (28.413)	
<i>MAS</i>	(+)				0.085*** (18.677)
Results of <i>log (SALES)</i> , <i>ROA</i> , <i>DE</i> , <i>HPEI</i> are omitted					
Adj. R ²		0.598	0.641	0.634	0.468
<i>F</i> statistic		200.1***	239.0***	232.1***	118.4***
<i>N</i>		669	669	669	669

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. *IDV*, *PDI*, *UAI* and *MAS* are one-tailed. White heteroskedasticity-consistent standard errors are in parentheses.

Table 10. Regression results (Dependent variable: *FAIR*)

	Sign	Model 1	Model 2	Model 3	Model 4
Intercept		-3.326*** (-8.127)	-0.155 (-0.263)	-3.084*** (-7.712)	-3.637*** (-7.993)
<i>IDV</i>	(+)	0.022*** (4.833)			
<i>PDI</i>	(-)		-0.032*** (-6.922)		
<i>UAI</i>	(+)			0.014*** (7.121)	
<i>MAS</i>	(+)				0.009** (2.533)
Results of <i>log (SALES)</i> , <i>ROA</i> , <i>DE</i> , <i>HPEI</i> are omitted					
Adj. R ²		0.257	0.283	0.285	0.239
<i>F</i> statistic		47.29***	53.72***	54.45***	42.84***
<i>N</i>		669	669	669	669

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. *IDV*, *PDI*, *UAI* and *MAS* are one-tailed. White heteroskedasticity-consistent standard errors are in parentheses.

Table 11. Regression results (Dependent variable: *CONSU*)

	Sign	Model 1	Model 2	Model 3	Model 4
Intercept		-4.617*** (-7.578)	3.938*** (4.557)	-3.888*** (-6.636)	-6.128*** (-8.823)
<i>IDV</i>	(+)	0.069*** (10.285)			
<i>PDI</i>	(-)		-0.085*** (-12.619)		
<i>UAI</i>	(+)			0.035*** (12.745)	
<i>MAS</i>	(+)				0.037*** (7.063)
Results of <i>log (SALES)</i> , <i>ROA</i> , <i>DE</i> , <i>HPEI</i> are omitted					
Adj. R ²		0.306	0.353	0.355	0.253
<i>F</i> statistic		60.32***	73.74***	74.54***	46.30***
<i>N</i>		669	669	669	669

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. *IDV*, *PDI*, *UAI* and *MAS* are one-tailed. White heteroskedasticity-consistent standard errors are in parentheses.

Table 12. Regression results (Dependent variable: *COMMU*)

	Sign	Model 1	Model 2	Model 3	Model 4
Intercept		-2.646*** (-4.447)	-8.385*** (-9.508)	-3.231*** (-5.379)	-0.789 (-1.199)
<i>IDV</i>	(+)	-0.059*** (-9.021)			
<i>PDI</i>	(-)		0.056*** (8.137)		
<i>UAI</i>	(+)			-0.026*** (-7.887)	
<i>MAS</i>	(+)				-0.042*** (-8.422)
Results of <i>log (SALES)</i> , <i>ROA</i> , <i>DE</i> , <i>HPEI</i> are omitted					
Adj. R ²		0.319	0.305	0.301	0.309
<i>F</i> statistic		63.69***	56.69***	58.63***	60.93***
<i>N</i>		669	669	669	669

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. *IDV*, *PDI*, *UAI* and *MAS* are one-tailed. White heteroskedasticity-consistent standard errors are in parentheses.

The value of *Perceptions of society (PS)* indices are 57 for China, 33 for Japan, and 26 for Korea, which indicates the percentage answering “yes” for the question about having trust in people; this is the opposite of *IDV*, therefore the expected sign in our estimation model is negative. The value of *Perceptions of individual well-being (Satisfaction with freedom of choice) (PIW)* indices are 77 for China, 78 for Japan, and 66 for Korea, and is the equivalent of *PDI*; therefore the expected sign is negative. The value of *Gender gap index rank (GGI)* indices are 69 for China, 101 for Japan, and 108 for Korea, where a higher index suggests a smaller gender gap; this is the equivalent of *MAS*, and therefore the

Table 13. Regression results (Additional analysis) (Dependent variable: CSR)

	Sign	Model 1	Model 2	Model 3
Intercept		5.993 (1.868)	9.577*** (0.880)	-30.035*** (-11.140)
<i>PS</i>	(-)	-0.329*** (-11.514)		
<i>PIW</i>	(-)		-0.350** (-2.574)	
<i>GGI</i>	(+)			0.250*** (11.497)
<i>log (SALES)</i>		2.553*** (12.138)	3.431*** (16.044)	2.548*** (12.098)
<i>ROA</i>		0.121 (1.281)	-0.103 (-1.026)	0.120 (1.272)
<i>DE</i>		0.054 (0.653)	-0.159* (-1.536)	0.072 (0.867)
<i>HPEI</i>		0.798 (1.210)	0.573 (0.793)	0.820 (1.246)
Adj. R ²		0.450	0.299	0.410
<i>F</i> statistic		93.81***	57.97***	93.70***
<i>N</i>		669	669	669

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. *PS*, *PIW* and *GGI* are one-tailed. *PS* = Perceptions of society (Trust in people), *PIW* = Perceptions of individual well-being (Satisfaction with freedom of choice), *GGI* = Gender gap index rank, *log (SALES)* = log of sales, *ROA* = Return on assets, *DE* = Debt-to-equity ratio, *HPEI* = High-profile environmental industries dummy. White heteroskedasticity-consistent standard errors are in parentheses.

expected sign is positive. Thus, our hypotheses will be empirically supported if the sign of the estimated coefficient for *PS* is significantly negative, the sign of the estimated coefficient for *PIW* is significantly negative, and the sign of the estimated coefficient for *GGIS* is significantly positive.

Table 13 presents the results. In Model 1, the coefficient of *PS* is significant ($p < 0.001$) and negative, which indicates that hypothesis 1 is supported. In Model 2, the coefficient of *PIW* is significant ($p < 0.01$) and negative, which indicates that hypothesis 2 is supported. In Model 3, the coefficient of *GGI* is significant ($p < 0.001$) and positive, which indicates that hypothesis 4 is supported. These results confirm that these cultural factors influence CSR disclosure.

5. Conclusion

CSR disclosure is a standard business practice worldwide, and China, Japan, and Korea lead CSR disclosure in Asia. Although these three countries have common Confucian cultural and historical roots, there are significant differences in their CSR disclosures. Hofstede's (1980) analysis of culture and Gray's (1988) theory on the influence of culture on accounting are extensively used in cross-cultural accounting studies to explain the differences across countries (e.g., Chand *et al.*, 2012). In comparison to financial reporting, CSR disclosure is influenced by stakeholders' information needs that are based on their respective national cultural backgrounds. O'Riordan and Fairbrass (2008) suggest that Hofstede's (1980) work on culture is relevant to CSR practices.

When analyzing cultural influence on CSR disclosure, it is important that other conditions should be equal to the extent possible. Therefore, this study focuses on China, Japan, and Korea, where the historical roots and institutional background of CSR disclosures are similar. In addition, although Orij (2010) uses a secondary data source (the Siri database) for CSR disclosure to represent CSR disclosure levels related to national cultures, this study uses primary data sources—firm CSR or sustainability reports published in local languages (in Chinese, Japanese, and Korean) for CSR disclosure content analysis. This study addresses three key questions: (1) whether there is a difference in firm CSR disclosure practice among China, Japan, and Korea, where historical backgrounds and institutional environments for CSR disclosures are relatively similar; (2) whether and which cultural factors affect CSR disclosure; and (3) whether the influence differs among CSR items. First, a content analysis of the CSR reports of Chinese, Japanese, and Korean firms in their local languages is conducted, based on the framework of the International Organization for Standardization (ISO) 26000—Social Responsibility. Based on this analysis, the study investigates whether and how national cultures influence CSR disclosures, and the degree of the influence among CSR items, using the theories of Hofstede (1980) and Gray (1988).

The results reveal three key findings. First, we confirm evidence that there are differences in firm CSR disclosure practices among countries. Second, we show evidence that the differences in CSR disclosures are partially attributable to domestic culture in the following ways. (a) CSR disclosure is positively related to individualism. This implies that, in individualist societies where the needs of the individual outweigh those of the many, firm CSR disclosure is prevalent. (b) CSR disclosure is negatively related to power distance. In societies where power is distributed equally, there is a greater likelihood of CSR disclosure. (c) CSR disclosure is positively related to uncertainty avoidance. A society's intolerance for uncertainty and ambiguity encourages firm CSR disclosure. (d) Masculine cultures, which typically value competitiveness, assertiveness, materialism, ambition, and power, stimulate firm CSR disclosure. These results are consistent with Gray's (1988) hypothesis. Third, this paper is the first to provide evidence that the cultural influence on CSR disclosure differs among the core items of ISO 26000. Each subject of CSR disclosure is also influenced by culture.

Our study contributes to the literature on CSR disclosures in several ways. First, we find evidence that domestic culture influences firm CSR disclosures in a more rigorous setting among countries where other historical backgrounds and institutional environments are similar. Second, our analysis used a primary firm CSR disclosure source—reports published in their local language (Chinese, Japanese, and Korean)—instead of secondary data sources, such as Siri, that have been used in previous research (Orij, 2010).

The results imply that both regulators and users must acknowledge cultural biases in firm CSR disclosures. When regulators design institutional arrangements to promote firm CSR disclosure, they should consider the influence of domestic culture. In addition, no matter how excellent the global CSR or sustainability disclosure guidelines are, firms disclose differently depending on their local culture. Regulators should commit to improving the disclosures in specific CSR areas where firms in a country disclose less. In addition, users of CSR disclosures should compare the disclosed information cross-nationally with consideration for domestic culture, and provide feedback to firms to improve the disclosure. Chand *et al.* (2012) indicate that national culture has a significant effect on accounting judgments, and educational similarity does not moderate the effect. As Chalmers *et al.* (2014) state, the results imply that global CSR disclosure guideline-setters should consider the cultural factors that may result in differences in interpretation and application, and should consider reducing these biases to avoid unintended reporting differences despite the use of global guidelines by firms. Strategies to adjust according to country cultural profiles are required for both regulators and users.

This study is limited by a focus on three countries in East Asia. Confucianism is a shared ideological influence in China, Japan, and Korea—countries that share the common

cultural roots of Confucianism. Although differences in CSR disclosure among these countries based on cultural influence are found, extended research into other areas might reveal greater differences. In addition, our content analysis is hampered by potential limitations with the measurement of our CSR disclosure score, which uses zero (no disclosure), one (only qualitative disclosure) and two (qualitative and quantitative disclosure) for each item. A disadvantages of this type of analysis is that it can present an overly simplistic view of the disclosure by distilling a great deal of information into a series of numbers. This limitation, however, applies to all content analysis studies, and has been noted in previous studies. Moreover, the study relates to the CSR reports of a single year, which was 2012. A longitudinal study may provide further insights.

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